1. A turbine blade for rotation about an axis, said turbine blade having an increased resistance to creep while generally maintaining operating stress levels at an interface region between said turbine blade and a mating turbine disk, said turbine blade comprising:

an attachment having a generally planar first surface generally parallel to said axis and a plurality of axially extending serrations for engagement with said turbine disk;

a neck fixed to said attachment and extending generally radially outward from said attachment, said neck have a region of minimum thickness that is measured generally perpendicular to said axis;

a platform fixed to said neck and extending generally radially outward from said neck;

an airfoil having a first end and a second end in spaced relation, wherein said airfoil first end is fixed to said platform and said airfoil extends generally radially outward from said platform;

a plurality of first cavities extending generally radially outward from said attachment first surface, through said attachment, and into said neck, such that said first cavities terminate radially inward of said platform.

2. The turbine blade of Claim 1 wherein said turbine blade is cast from a high density nickel base alloy having high temperature capability.

3. The turbine blade of Claim 1 wherein said plurality of first cavities each have a center, a first diameter D1 that is 50% - 75% of said neck minimum thickness, and are located axially along said attachment first surface such that said centers are spaced apart by a length L, wherein said length L is approximately 1.5 times diameter D1.

4. The turbine blade of Claim 3 wherein said plurality of first cavities is machined into said turbine blade by electro chemical machining or electrical discharge machining.

5. The turbine blade of Claim 1 further comprising a shroud fixed to said airfoil second end.

6. A turbine blade for rotation about an axis, said turbine blade having an increased resistance to creep while generally maintaining operating stress levels at an interface region between said turbine blade and a mating turbine disk, said turbine blade comprising:

an attachment having a generally planar first surface generally parallel to said axis and a plurality of axially extending serrations for engagement with said turbine disk;

a neck fixed to said attachment and extending generally radially outward from said attachment, said neck have a region of minimum thickness that is measured generally perpendicular to said axis;

a platform fixed to said neck and extending generally radially outward from said neck;

an airfoil having a first end and a second end in spaced relation, wherein said airfoil first end is fixed to said platform and said airfoil extends generally radially outward from said platform;

a plurality of first cavities extending generally radially outward from said attachment first surface, through said attachment, and into said neck, such that said first cavities terminate radially inward of said platform.

a plurality of first cooling holes extending generally radially outward from said plurality of first cavities, through said platform, and said airfoil, and in fluid communication with said plurality of first cavities.

7. The turbine blade of Claim 6 wherein said turbine blade is cast from a high density nickel base alloy having high temperature capability.

8. The turbine blade of Claim 6 wherein each of said plurality of first cavities have a center, a first diameter D1 that is 50% - 75% of said neck minimum thickness, and are located axially along said attachment first surface such that said centers are spaced apart by a length L, wherein said length L is approximately 1.5 times diameter D1.

9. The turbine blade of Claim 8 wherein each of said plurality of first cooling holes shares a center with a first cavity, and has a second diameter D2 that is smaller than said first diameter D1.

10. The turbine blade of Claim 9 wherein said plurality of first cooling holes is machined into said turbine blade by electro chemical machining or electrical discharge machining.

11. The turbine blade of Claim 6 further comprising a shroud fixed to said airfoil second end.